Thank you Mr. Chairman and members of the Domestic Policy Subcommittee, for the opportunity to present to you some important concerns about the pending release of Dicamba-resistant soybeans. My name is Steve Smith, Director of Agriculture for Red Gold, the largest privately held canned tomato processor in the United States, based in Indiana with three processing facilities located there. We purchase tomatoes from 54 family farming operations in Indiana, Ohio and Michigan each year.

In my capacity at Red Gold, I am privileged to interact with a wide segment of the specialty crop industry in the Midwest, home to a diverse array of canned and frozen fruit and vegetable production, as well as local fresh market and organic production marketed directly to local consumers. A growing wine grape industry has also begun to flourish in Indiana, adding to our diverse production base. This industry is worth 254 million dollars to the State of Indiana, providing thousands of jobs throughout our state. These groups, and nearly every food crop represented on the grocers shelves and produce stands, all have an intense interest about the effects of the widespread use of dicamba and the devastation it will cause to the sensitive crops grown in our region.

My life experiences include growing up in central Indiana on a traditional family farming operation, graduating with distinction from Purdue University in

Agriculture and being named a Distinguished Alumni in 2009, serving as a Regional Sales Manager for a seed corn and soybean company, holding a Certified Crop Advisor certificate and having 22 years of experience in the specialty crop industry with Red Gold. I am convinced that in all of my years serving the agricultural industry, the widespread use of dicamba herbicide possesses the single most serious threat to the future of the specialty crop industry in the Midwest.

The use of dicamba is not new. It has been a labeled product for use on corn for decades. It has been proven effective for many uses and is not particularly vulnerable to developing resistant strains of weeds. It is economical to apply.

So many may be wondering why a product that is effective, proven, and economical is not the number one herbicide in use today. The answer is simple. Dicamba has proven itself to move off-target and cause injury and yield reductions to soybeans and so in a large sense, it is rarely used. Farmers respect their neighbors and know they are at risk of causing injury if they use dicamba, so for the most part, dicamba is not widely and routinely used in corn production. However, when soybeans become tolerant to dicamba, it is very likely that the amount of dicamba used in corn production will skyrocket when the fear of soybean injury is eliminated. As an example, when glyphosate soybeans were first introduced, there was significant injury due to drift on corn the first few years. It

didn't take long for applicators and farmers to gain a higher degree of respect for the injury that could occur. But once the widespread use of glyphosate resistant corn became common, that level of caution began to erode because it didn't really matter if you drifted onto your neighbor, because their crop was also glyphosate resistant. I also predict a similar fate for dicamba use once soybeans are made tolerant. With no fear of soybean injury, the use of dicamba on corn acreage will dramatically increase, raising the overall exposure of sensitive crops to injury. Because dicamba is deadly to weeds and cheap to use, it is a sure prediction that dicamba use will increase dramatically, followed by escalating crop losses.

In other testimony offered, you may hear that new formulations of dicamba will reduce the risk of volatization. Volatization is the process where the active ingredient literally evaporates into the air and can relocate as the air moves. We believe those claims to be overly optimistic as the characteristics of this molecule have been well documented for about 50 years, and even the newest formulations are still proven to move off-target.

Some might interpret this testimony to imply that I am opposed to advances in technology, and that progress is not a thing to be pursued. Nothing could be further from the truth. The technological progress made in the last twenty years is responsible for us having the world's safest, most nutritious and affordable food supply. Many might suggest that technology has taken us the wrong direction and

is harming our environment and the sustainable nature of agriculture. I would suggest just the opposite to be true when good stewardship practices are implemented and followed. Productivity is a good thing. It lifts our standard of living. If Red Gold can produce a nutritious product for our consumers at a cost they can afford, everyone wins.

However, technological advances need to be critiqued and examined for their overall contributions and unintended consequences. Just because we can do something doesn't mean that we should. At one time, the conventional wisdom thought it was a good idea to use lead in paint. The theory of dicamba tolerant technology might appear sound on the surface. The ability to kill weeds is proven. But the potential damage to other sectors of agriculture and rural homeowners demands that we look further at this particular advance. There may even be geographic areas of the country where this technology would cause only minimal harm and adequate protective measures might even be put into place to protect the public's interest, but definitely not in the Midwest. If dicamba tolerant soybeans are released onto the market place in the Midwest, they will be used and cause harm to our traditional cropping system. Anything that has the potential to cause that type of widespread crop damage should have intense discussion and oversight. When that occurs, the answer will become abundantly clear. The widespread use of dicamba is incompatible with Midwestern agriculture.

Since the introduction of glyphosate resistant crops, the pattern of weed control in the Midwest has changed from predominantly pre-plant applications of herbicides, to almost entirely a post-plant, in-season application practice. The effects of this paradigm shift in herbicide applications has affected our company and family growers in a very negative way, due to the potential for direct drifting of spray material onto our tomato fields from applications during windy conditions. The majority of herbicide applications were historically made prior to the planting of most specialty crops, so the drifting of products caused little or no harm. However, the transformation to herbicide applications during the growing season in June and July has put drift prevention at the forefront of concerns to sensitive crop producers of all kinds. Over the last four seasons, our company and growers have been involved with cropping losses exceeding a million dollars due to glyphosate drift.

In addition to the financial loss to our growers, Red Gold is placed in considerable risk of supply disruption due to the drifting of post-applied herbicides. Unlike commercial grain production, if our tomatoes are damaged, processing tomatoes are not available to be purchased on the open market to make up the losses. We suffer from the risk of having inadequate product for our customers, which could result in the permanent loss of business due to lack of supply. We willingly have chosen to deal with all the traditional production risks

and plan our business to minimize those risks, but we are helpless to anticipate the cropping losses that occur due to the misapplication and drift of glyphosate onto our tomatoes. Good stewardship by neighbors and applicators has been fairly successful in preventing direct drift. Unfortunately, with dicamba tolerance being added to soybeans, a whole new challenge far more dangerous and unpredictable than direct drift is knocking on our door.

With glyphosate, crop injuries are the result only from direct drift. Glyphosate is not a volatile compound that will pick up and move in the days or hours following application. Dicamba on the other hand, is highly vulnerable to off-site movement in three forms:

- 1. **Direct drift.** Dicamba is readily moved by the wind during application.

 Direct drift is in theory, always preventable, by either applying within label restrictions of wind or by applying when the wind direction would not result in a threat to a sensitive crop.
- 2. Volatization. Dicamba is proven to volatize, or more simply, for the active ingredient to evaporate into the air where it is easily moved off-target as the air mass moves. It can move up to two miles in distance, or even more in certain regions such as down a valley. As opposed to direct drift, the environmental conditions that effectively minimize drift, ironically, maximizes the potential for volatilization. Those conditions are high

temperatures and high humidity, conditions that are common during a Midwestern summer when a post-applied application of dicamba would be most likely. A producer trying to be a good neighbor, who awakens early so he can spray next to our tomato field before any wind picks up, actually would be applying the material in the most vulnerable fashion for volatilization to occur. Because this can occur for up to four days following the initial application, an applicator cannot adequately take measures to prevent both drift and volatilization. He is in a no-win situation, as is every sensitive crop within a two or more mile radius where dicamba would be applied. The science is clear and settled in regard to dicamba's susceptibility to off-target movement due to volatility.

3. Spray tank contamination. Dicamba has characteristics that make it extremely hard to get completely cleaned out of spray tanks following use.
Some commercial applicators have told me that they refuse to spray dicamba because they risk damaging the crops of their customers. Even small quantities left in a spray tank will injure crops.

Crop losses caused by direct drift are a violation of label restrictions; however, crop losses caused by volatization are not a violation of the pesticide label. The weather conditions during the application are the deciding factors of misapplication, not what happens at a later time. There will be no recourse for

growers or processors for crop losses resulting from volatilization. It is likely that the source of losses might never even be completely pinpointed because under widespread use, the problem could have come from a multitude of sources. Our very livelihoods, and those of our growers, are under severe risk if the widespread use of dicamba is permitted.

The risk of off-target movement is not limited to only tomatoes and other fresh market produce. Growers of non-dicamba tolerant soybeans will be at risk.

Organic producers not only risk the loss of produce for sale, but also risk their organic certification for three years if off-target movement of dicamba would occur. Grape and vineyard production is extremely vulnerable and production could be lost for multiple seasons if a serious off-target movement occurred. This would be devastating for many of the most vulnerable small farm producers.

These are the farms that produce the fruits and vegetables that become our main weapon in our fight to reduce our national obesity epidemic.

The nature of the common layouts of Midwestern farms, places all of these sensitive crops in close proximity to soybean production where dicamba would be used in a widespread manner. But in addition to the cropping risks posed by the widespread use of dicamba, the desire for country living environments has driven the trend for home construction out into the countryside. Home gardens and landscaping would be extremely vulnerable to off-target movements because of

their proximity to the farming areas of the Midwest. In an atmosphere of consumers worried about where their food comes from and worries of residues from all crop protectants in the food supply, damage caused by the off-target movement of dicamba would give all of agriculture a black-eye if home gardens or landscaping were damaged.

If the risks of off-target movement of dicamba due to volatization are low and can be effectively controlled through product stewardship and formulations, it only makes sense that those who will profit from the sale of this seed technology and the makers of dicamba should willingly step up to the plate and establish an indemnity fund to cover crop losses and homeowner's claims for damages. If they are unwilling to cover potential losses, is this an admission that the safety of this technology is not as safe as we would be led to believe?

Agriculture needs to be building up the confidence of producers and consumers instead of giving them cause for alarm. The Midwest is the home to a unique system of family farms that have been the breadbasket of world agricultural production. The introduction of dicamba tolerant soybeans is a classic case of short-sighted enthusiasm over a new technology blinding us to the reality that is sure to come. Increased dicamba usage, made possible through the introduction of dicamba tolerant soybeans, is poor public policy and should not be allowed.